

The Claims:

1. A method of broadcasting information and data files to mobile units, comprising steps of:
 - (a) receiving, through a bi-directional wireless network, a data request from a requesting mobile unit, the data request including identification information for the requesting mobile unit;
 - (b) associating the data request with a digital data file;
 - (c) broadcasting the digital data file together with identification data for the requesting mobile unit over a download channel on a broadcast network that has a plurality of broadcast channels and an overlapping coverage area with the bi-directional wireless network; and
 - (d) simultaneously with step (c), broadcasting on at least one broadcast channel of the broadcast network other than the download channel a media signal for real-time reception by mobile units tuned to the at least one other broadcast channel.
2. The method of claim 1 further including:
 - (e) receiving the broadcast identification data at the requesting mobile unit, determining if the identification data corresponds to the requesting mobile unit, and if so, receiving and storing the digital data file at the requesting mobile unit for future use.
3. The method of claim 2 further including:
 - simultaneously with step (e) receiving the signal broadcast on the at least one other broadcast channel for real-time reception at the requesting mobile unit.
4. The method of claim 1 further including, prior to step (a), a step of broadcasting on the at least one other broadcast channel a prompt to encourage users of the mobile units to submit data requests for the digital data file to the bi-directional wireless network.

5. The method of claim 4 wherein the prompt includes information encouraging the users of the mobile units to contact a specified address associated with the bi-directional wireless network to request the digital data file.
6. The method of claim 5 wherein the bi-directional wireless network is a cellular network and the specified address is a telephone number.
7. The method of claim 6 wherein the data request includes the telephone number and in step (b) the telephone number is used as identifying information to associate the data request with the digital data file.
8. The method of claim 4 wherein the prompt includes information causing a real-time aural message over a speaker at receiving mobile units.
9. The method of claim 4 including receiving data requests from a plurality of requesting mobile units only for a finite predetermined duration after broadcasting the prompt, the data requests each including identification information for the respective requesting mobile units, and in step (c) the digital data file is broadcast together with identification data for the requesting mobile units for which data requests were received during the finite predetermined duration.
10. The method of claim 1 wherein the data request includes identifying information for the digital data file, and including, between steps (b) and (c), transmitting the digital data file from a data file storage to a broadcast location for subsequent broadcast over the download channel.
11. The method of claim 1 including, after step (a) and prior to step (c) transmitting through the bi-directional wireless network to the requesting mobile unit information identifying the download channel.

12. The method of claim 1 wherein the broadcast network includes a plurality of terrestrial OFDM transmitters arranged as a single frequency network.
13. The method of claim 12 wherein the broadcast network broadcasts digital audio signals and the data file is a digital audio file.
14. The method of claim 13 wherein the digital audio file is an MP3 file.
15. The method of claim 1 including:
receiving from plurality of the mobile units over the bi-directional wireless network information about usage by the mobile units of the broadcast network, including information about channels tuned to by the mobile units and length of usage of the tuned to channels.
16. A mobile unit comprising:
a bi-directional communications system for receiving and sending transmissions from and to a wireless bi-directional communications network;
a first broadcast receiver system for (i) receiving a real time broadcast transmission over a selected one of a plurality of selectable broadcast channels from a broadcast network having a coverage area overlapping with the bi-directional communications network, and (ii) receiving a data file over a download channel from the broadcast network, the selected one broadcast channel and the download channel being different channels;
a storage;
a user output device selected from the group consisting of a speaker and a display; and
a processor connected to the communications systems, the storage and the user output device for (i) sending a request for a playable media file through the bi-directional communications system to the wireless bi-directional communications network, the request including information identifying the mobile unit, and (ii) receiving the data file from the broadcast network through the first

broadcast receiver system and storing the data file in the storage while at the same time receiving the real time broadcast transmission from the broadcast network through the first broadcast receiver system and generating a corresponding real time output on the user output device in response thereto.

17. The mobile unit of claim 16 wherein the first broadcast receiver system is a terrestrial broadcast receiver, and the mobile unit also including a satellite receiver system for (i) receiving a real time broadcast transmission over a selected one of a plurality of selectable satellite broadcast channels from a satellite network having a coverage area overlapping with the bi-directional communications network, and (ii) receiving a data file over a satellite download channel from the satellite network, the selected one satellite broadcast channel and the satellite download channel being different channels;

wherein the processor is configured for receiving the data file through one of the first broadcast receiver system and the satellite receiver system and storing the data file in the storage while at the same time receiving the real time broadcast transmission through one of the first broadcast receiver system and the satellite receiver system and generating a corresponding real time output on the user output device in response thereto.

18. A method for tracking reception information for a wireless subscriber unit, comprising:

(a) receiving at a subscriber unit over time a plurality of selectable broadcast signals broadcast over a plurality of selectable channels by a wireless broadcast network;

(b) storing at the subscriber unit usage information about use by the subscriber unit of the wireless network; and

(c) transmitting the stored usage information from the subscriber unit to a bi-directional wireless communications network that has an overlapping coverage area with the broadcast network.

19. The method of claim 18 wherein the usage information is transmitted to the bi-directional wireless communications network at predetermined intervals.

20. The method of claim 18 wherein the usage information is transmitted to the bi-directional wireless communications network upon the subscriber unit receiving instructions over one of the bi-directional wireless communications network and the wireless broadcast network.

21. The method of claim 18 wherein the bi-directional wireless communications network includes a plurality of base units connected to a coordinating hub, the base units having associated coverage areas for communicating with the subscriber unit as it moves through a coverage area of the bi-directional wireless communications network, the bi-directional wireless communications network including a dedicated control channel through which network administration information is substantially continuously communicated between the subscriber unit and the bi-directional wireless communications network, wherein in step (c) the stored usage information is transmitted through the dedicated control channel.

22. The method of claim 21 including receiving through the control channel stored usage information from a plurality of subscriber units, and compiling the stored usage information at the coordinating hub.

23. The method of claim 18 wherein the usage information includes identification of channels audited by the subscriber unit and the time periods during which the identified channels were audited.